Groundfish PDT Report:

Georges Bank Yellowtail Flounder ABCs for FY 2018- FY 2019

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SSC Meeting August 8, 2017



SSC Recommendations in 2016

- 1. ABC for the Georges Bank yellowtail flounder stock should not exceed 354 mt for FY2017 and FY2018, with the expectation that the FY2018 catch specifications will be revisited and possibly adjusted following the 2017 TRAC assessment. OFL for the stock remains unknown.
- 2. An SSC sub-group should be formed to develop alternatives for quantitative metrics that would trigger an upward or downward adjustment of the ABC. We expect that the SSC will request time at an upcoming meeting to review the work of the sub-group and develop recommendations, as appropriate.

PDT Discussion – Net Efficiency

- Change in q to 0.31
 - More accurate biomass estimate
 - Conservative
 - Maximum value
- Change in q does not change the survey biomass trend, but does scale the absolute biomass and possible removals when an exploitation rate is applied.

PDT Discussion- Exploitation Rate Approach

- Provides a technical basis for catch setting tied directly to the NEFSC and DFO surveys.
- Based on survey variability could result in wide swings in catch advice from year to year.

PDT Discussion- Fishing Mortality and Stock Dynamics

- Stock does not appear to have responded to low catches.
- Unclear if or what environmental driver(s) may be negatively impacting stock productivity.
- Catches might not be indicative of biomass, and changes in catch may not accurately track changes in biomass well for this stock.
- Recent low quotas for GB yellowtail flounder have not appeared to constrain the U.S. groundfish fishery in its access to other abundant stocks like GB haddock. Otherwise, GB yellowtail flounder would be expected to be caught at a higher rate.
 - Total fishery catches were 218 mt in 2013, 159 mt in 2014, 118 mt in 2015, and 44 mt in 2016.
 - Quotas lower than recent catches may constrain access to other species (i.e., haddock, scallops).

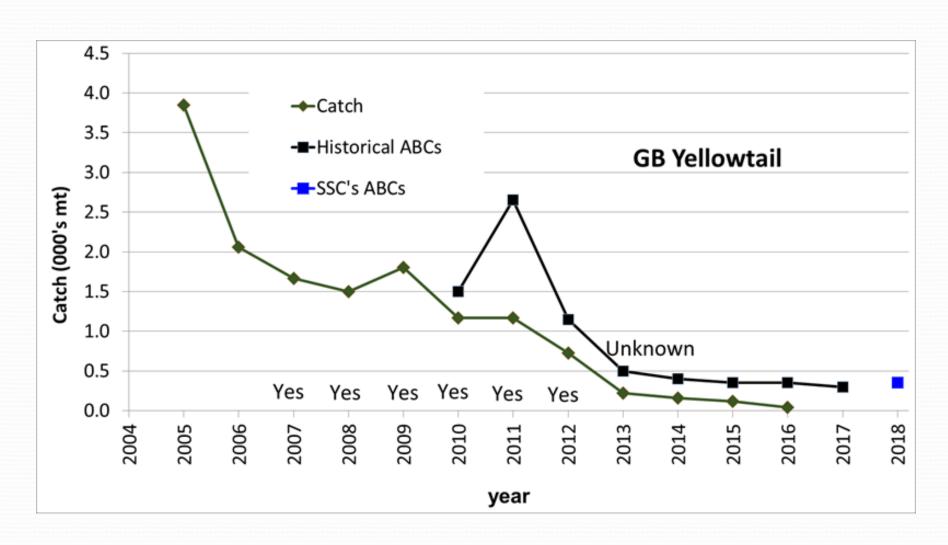
Groundfish Fishery Catch Performance

	Total	US %	US TAC	% US	Groundfish	Groundfish	Percent
	Shared	Share	(mt)	TAC	sub-ACL	catch (mt)	Groundfish
	TAC – US			Caught	(mt)		ACL Caught
	& CA						(%)
	(mt)						
FY2011	2,650	55%	1,458	76%	1142.0	990.0	86.7
FY2012	1,150	49%	564	68%	368.3	215.5	58.5
FY2013	500	43%	215	43%	154.5	55.8	36.1
FY2014	400	82%	328	37%	254.5	62.5	24.5
FY2015	354	70%	248	27.5%	202.9	38.4	18.9
FY2016*	354	76%	269		250.8	23.9	9.5
FY2017**	300	69%	207		163.0	21.4	13.1
FY2018		71%					

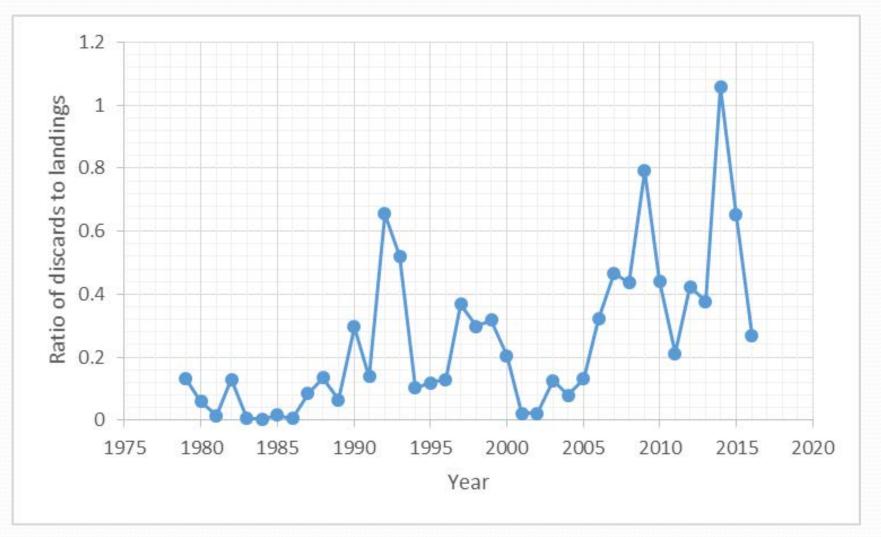
^{*}Indicates preliminary year-end catch data.

^{**}Preliminary in-season catch estimate as of July 28, 2017, GARFO catch reports.

Total Catch Performance



Ratio of US discards to US landings



PDT Discussion- Market for Yellowtail Flounder

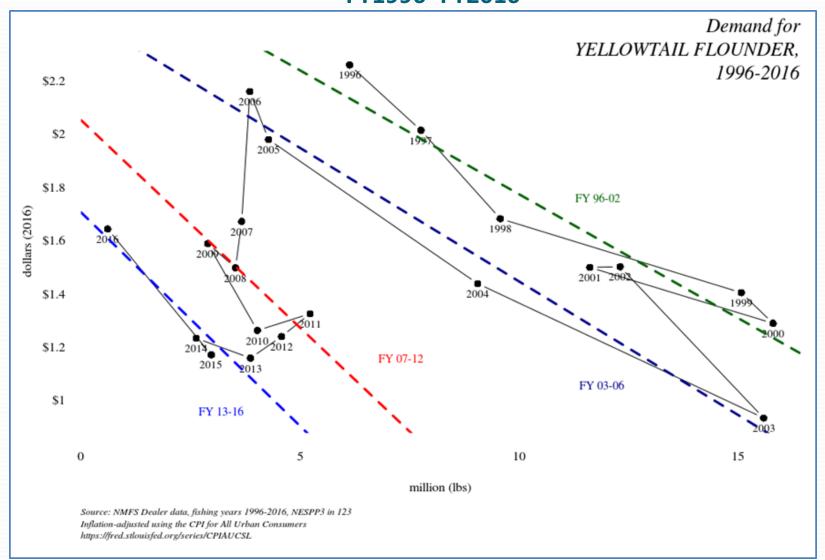
- PDT discussed the work by Cadrin et al. on a market analysis for yellowtail flounder.
- Cadrin et al. suggest that:
 - The lack of yellowtail landings in the Georges Bank stock area are driven in large part by the smaller quotas themselves, such that demand for yellowtail flounder has dropped off because of a lack of supply to the market; and
 - 2. This creates a circumstance where the relationship between the commercial catch and the underlying stock biomass has broken down.

PDT Discussion- Market for Yellowtail Flounder

- Landings have declined substantially for this stock, while landings of yellowtail flounder overall (GB, Southern New England/Mid-Atlantic and Cape Cod/Gulf of Maine stocks combined) have remained relatively stable between 2.7 and 5.1 million pounds from 2005-2015.
- It is unlikely that other stocks of yellowtail flounder are not perfect substitutes for GB yellowtail flounder in the marketplace, and this relative stability of landings does run counterpoint to the hypothesis that reduced supply has led to reduced demand.

Demand function for yellowtail flounder

FY1996- FY2016



PDT Discussion- Market for Yellowtail Flounder

- An analysis of the relationship between price and quantity for yellowtail flounder indicates overall demand declined substantially over the past 20 years.
- For example, between 2006 and 2013, a period where supply was relatively stable, prices dropped nearly 45% in real terms.
 - One explanation is that yellowtail prices do not justify the expenses required for larger trawlers to make multi-day trip to Georges Bank in order to target this stock.
- Extraordinarily low quotas and additional restrictions such as windowpane flounder accountability measures further exacerbate this situation.

PDT Recommendation

- The PDT does not recommend an increase in GB yellowtail flounder quota from the 2017 quota of 300 mt. The PDT is concerned about the continued declines in survey biomass estimates, low stock productivity, and poor state of the stock.
- The PDT could not reach consensus on a value to recommend for the GB yellowtail flounder quota for FY 2018. Some members proposed using the most recent three year (2014-2016) average catch of 107 mt in the interim to allow the stock the possibility for rebuilding. A 107 mt quota would represent a 3.4% exploitation rate. Other members suggested holding the quota constant at 300 mt since the fishery removals do not appear to be driving the stock dynamics. A 300 mt quota would represent about a 10% exploitation rate.

Scallop Management on Georges Bank

Council Staff

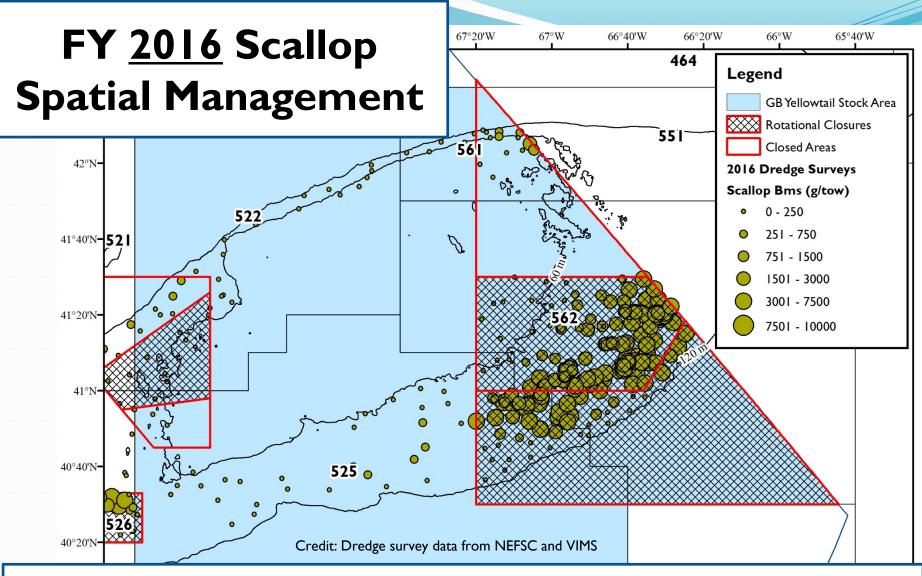
SSC August 8, 2017



Rotational Management

- The scallop fishery's estimated bycatch of GBYT varies annually with the rotational management program.
 - Goal is to optimize YPR, involves multi-year closures of areas.
- In years when CA II is closed, yellowtail bycatch is generally lower, when open bycatch increases.

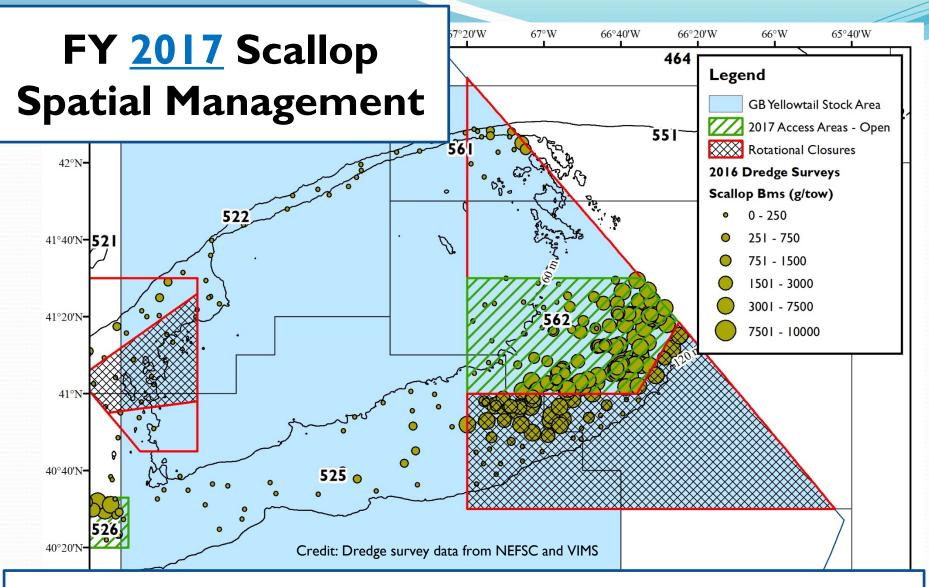
FY	US/Canada		Groundfish		Scallops		Rotational Management			
	Total TAC	US Share	US TAC	GF ACL (mt)	GF Catch (mt)	Scallop ACL (mt)	Scallop catch (mt)	CAII Open?	CAII Ext Open?	In-season transfer?
2015	354	70%	248	202.9	38.4 (18.9%)	38	29.7 (78.1%)	No	Yes (DAS)	Yes (7.9 mt)
2016	354	76%	269	250.8	23.9 (9.5%)	42	2.1 (5%)	No	No	Yes (39.8 mt)
2017	300	69%	207	163	*21.4 (10.1%)	32	*14.5 (63.2 proj.)	Yes	No	TBD



- Rotational Management: CA I, CA II, CA II Ext closed
- 2016 dredge surveys: Majority of scallop biomass within closures
- Access on GB was restricted to LA DAS (34.55 DAS)

FY2016

- Scallop GB yellowtail bycatch: 2.1 mt
- Key areas where scallop biomass overlaps with GBYT were closed.
- Only 'open area' fishing under LA DAS (FT LA DAS: 34.55).
- Continuation of the seasonal closure of CA II AA from Aug.
 15 Nov. 15 to reduce yellowtail bycatch.
- Prohibition on possession/landing of YT, bycatch avoidance program, other measures.
- In-season transfer of 39.8 mt (95% of scallop sub-ACL) to groundfish fishery.



- Rotational Management: CA I, CA II Ext <u>closed</u>; CA II <u>open</u>
- Majority of scallop biomass within rotational areas
- Access on GB: I FT LA trip (6 mil. landed lbs), LA DAS (30.41 DAS)

FY2017

- CA II open: I FT LA trip at 18,000lbs (6 mil. lbs).
- CA II Extension closed.
- The scallop PDT projected 63.2 mt of yellowtail bycatch, the majority coming from CA II.
 - Scallop sub-ACL is 32mt for FY2017.
 - 14.5 mt of bycatch through May 27, 2017.
 - 3.75 mil. lbs of scallops landed from CA II through Aug. 2, 2017.
- Continuation of the seasonal closure of CA II AA from Aug.
 15 Nov. 15 to reduce yellowtail bycatch.
- Prohibition on possession/landing of YT, bycatch avoidance program, other measures.
- No RSA Compensation fishing in CA II (reduce YT bycatch).

Recent and Potential Council Actions

- In Groundfish FW56, Council modified the AM trigger for the scallop fishery. (no 150% trigger)
 - AM is triggered if scallop fishery exceeds its sub-ACL and the US ACL is exceeded.
- Council is considering modifying GBYT AM in Scallop FW29.
- For FW29, Scallop PDT developing 'gear restricted area' options, may consider time/area closures. Ist review in Sept.

FY2018 Outlook - Preliminary

- The scallop PDT and Council have not reviewed 2017 scallop survey data. Outlook based on 2016 process.
- There is potential for another 'CA II' AA trip in FY2018.
- There is potential for the CA II extension, a rotational closure in place for FY 2016 - 2017, to open.
- Continuation of the seasonal closure of CA II AA from Aug.
 15 Nov. 15 to reduce yellowtail bycatch, other measures.
- Newly designed GBYT AM (only in place if scallop sub-ACL and overall ACL exceeded).